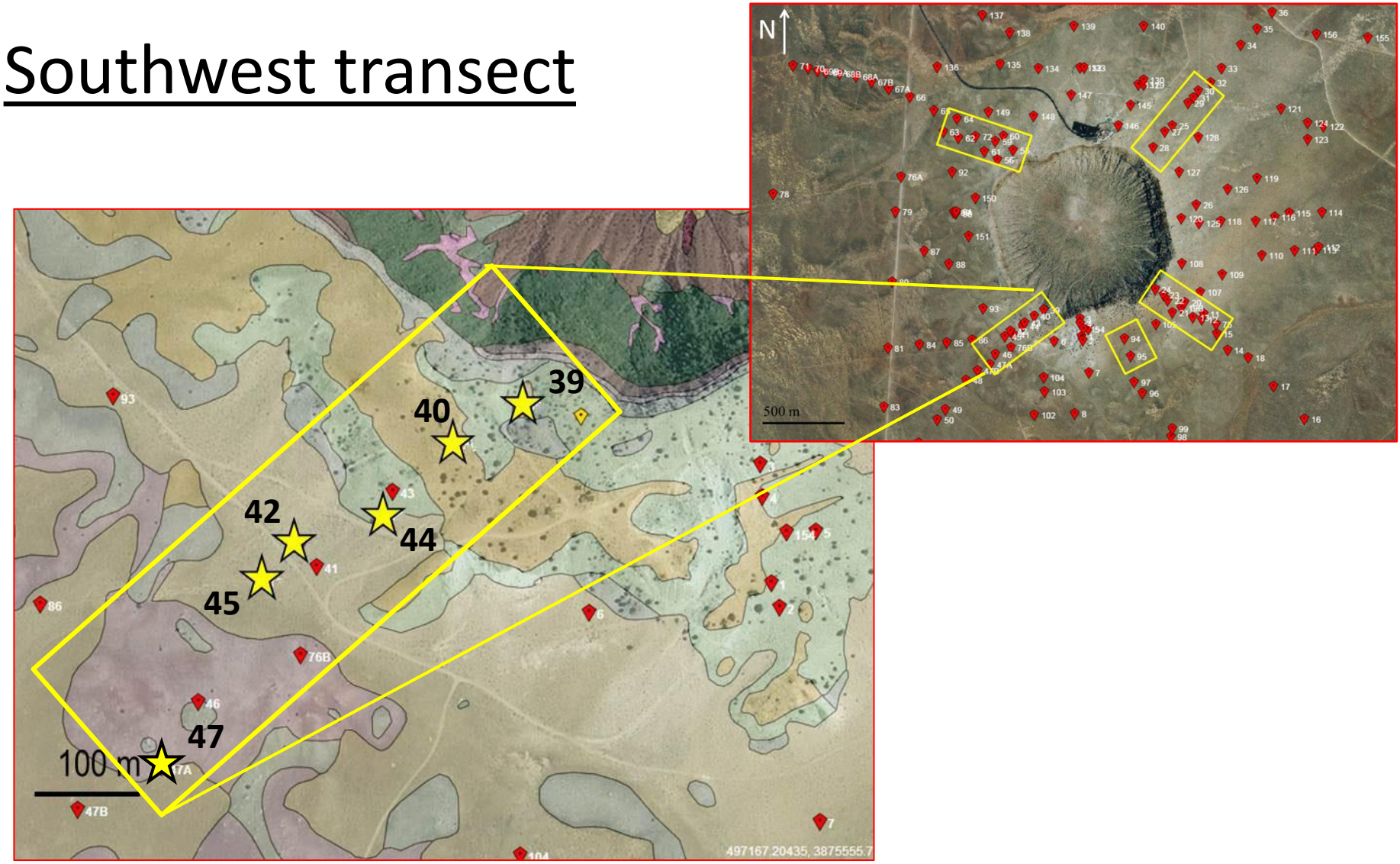
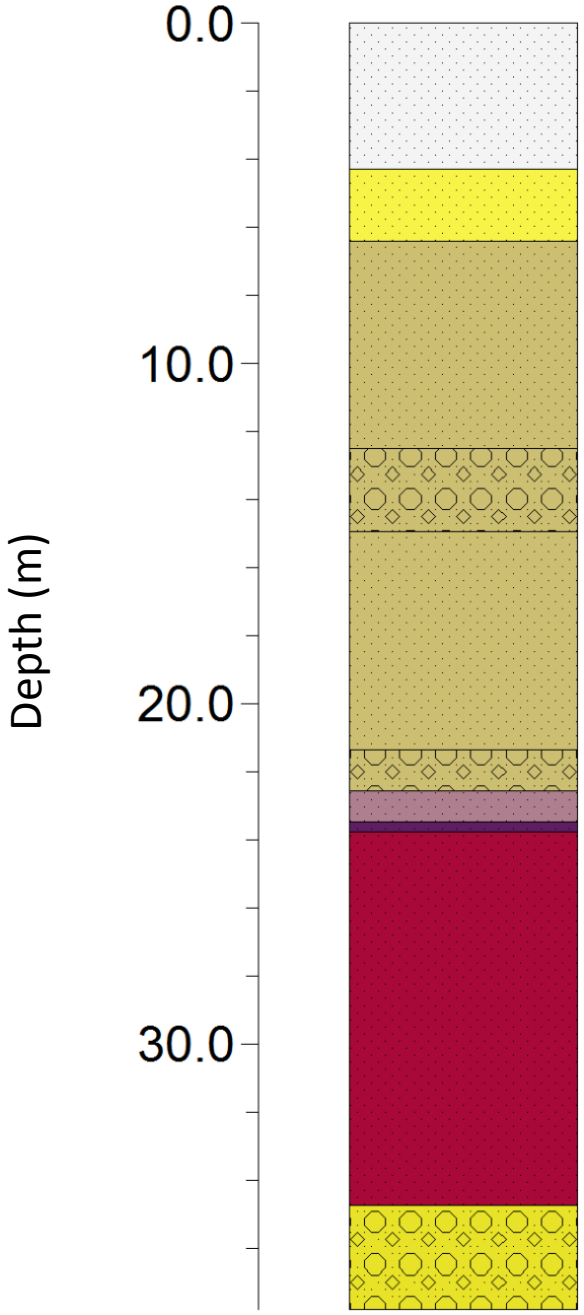
Southwest transect



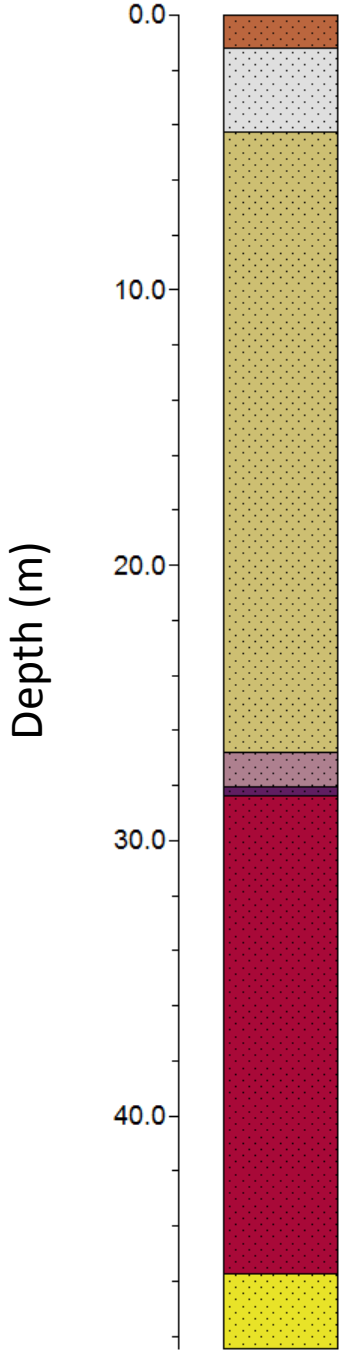
Drill hole 39

- ~40 m from the crater rim
- 0 – 4.3 m is heavily-shocked Coconino
- 4.3 – 6.4 is heavily-shocked Kaibab
- 6.4 - 22 m is minimally-shocked Kaibab
- Majority of the units are sand-dominant



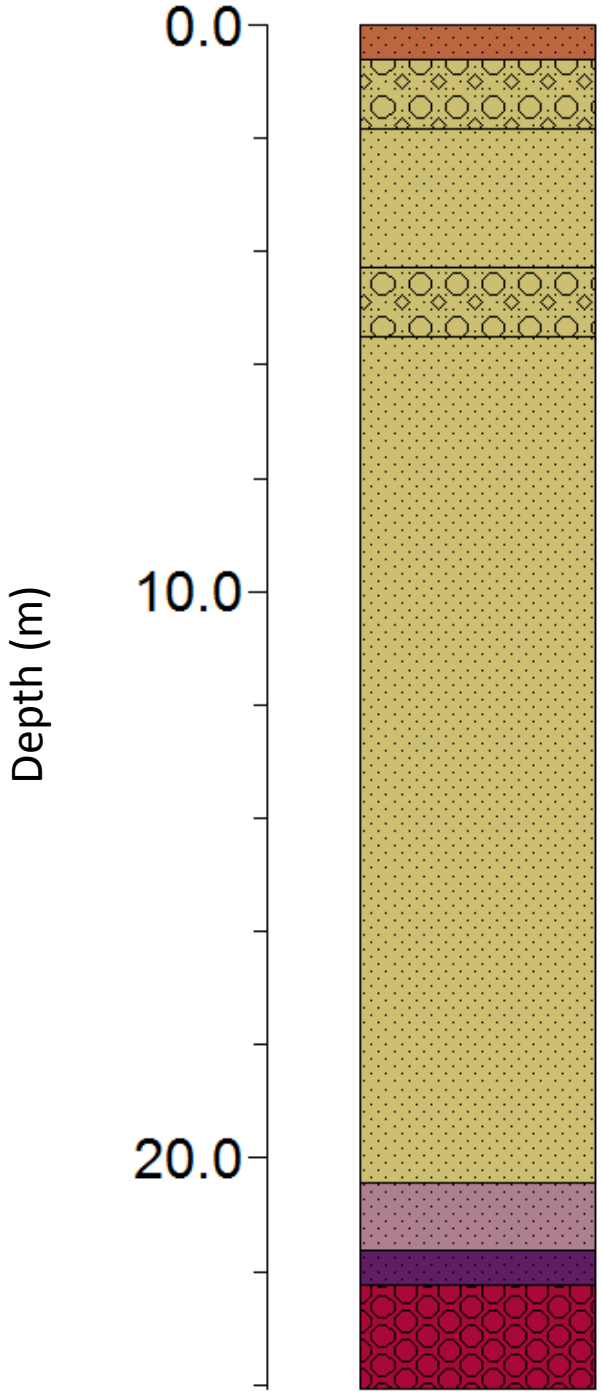
Drill hole 40

- ~70 m from the crater rim
- The first 1.8 m is alluvium
- From 1.8 – 4 m is minimally-shocked Coconino
- 4 – 27 m is minimally-shocked Kaibab
- All lithologies are sand-dominant



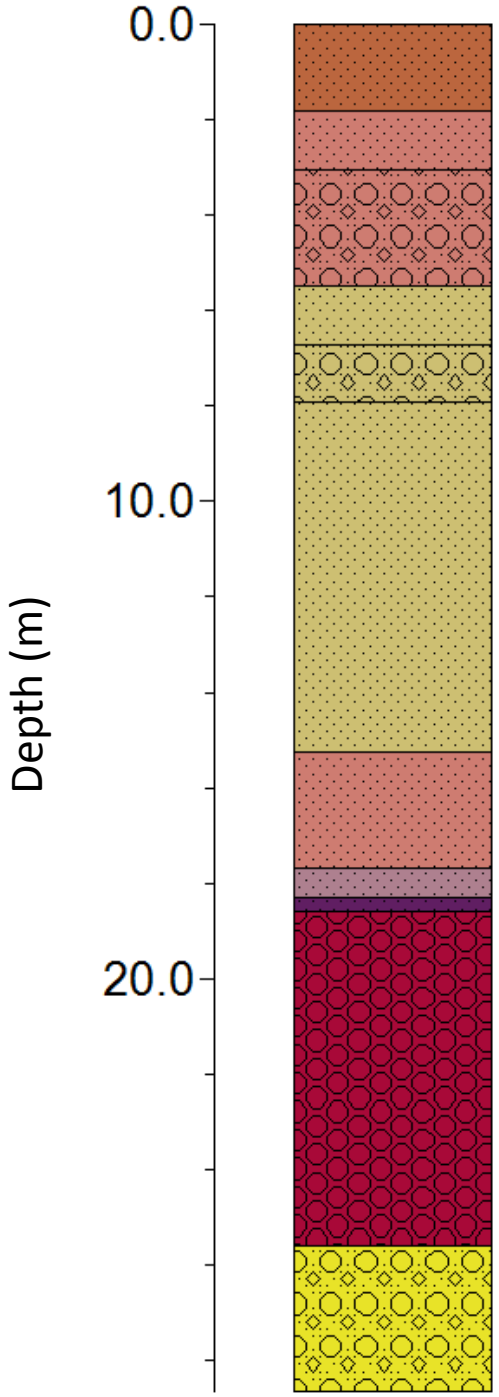
Drill hole 44

- ~170 m from the crater rim
- The first ~0.5 m comprises alluvium and impact melt (0.7 vol%)
- ~0.5 – 20 m is minimally-shocked Kaibab
- Majority of units are sand-dominant



Drill hole 42

- ~260 m from the crater rim
- First 1.8 m is alluvium
- 1.8 – 5.5 m there is mixing of Kaibab and Moenkopi (~90% Kaibab and ~10% Moenkopi)
- From 1.8 – 3 m, there is ~5 vol% impact melt present
- Minimally-shocked Kaibab is the dominant rock type from 5.5 – 15 m
- There is mixing again with Kaibab and Moenkopi from 15 – 18 m (~85% Moenkopi and ~15% Kaibab)

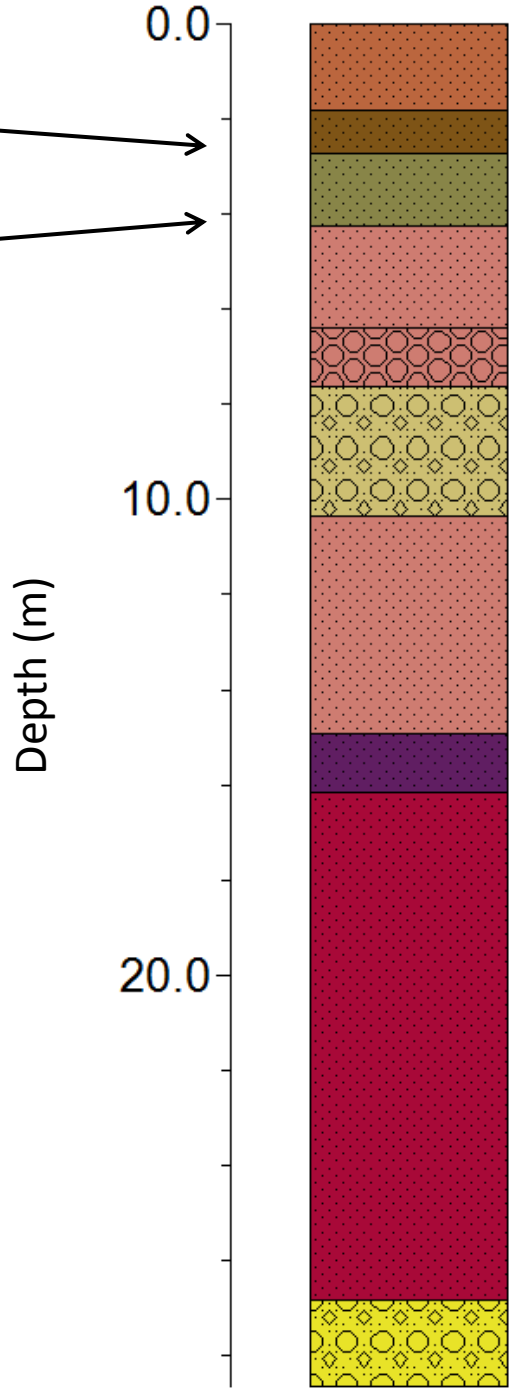


Drill hole 45

Impact melt makes up 38 vol% of the rock unit at ~2.5 m

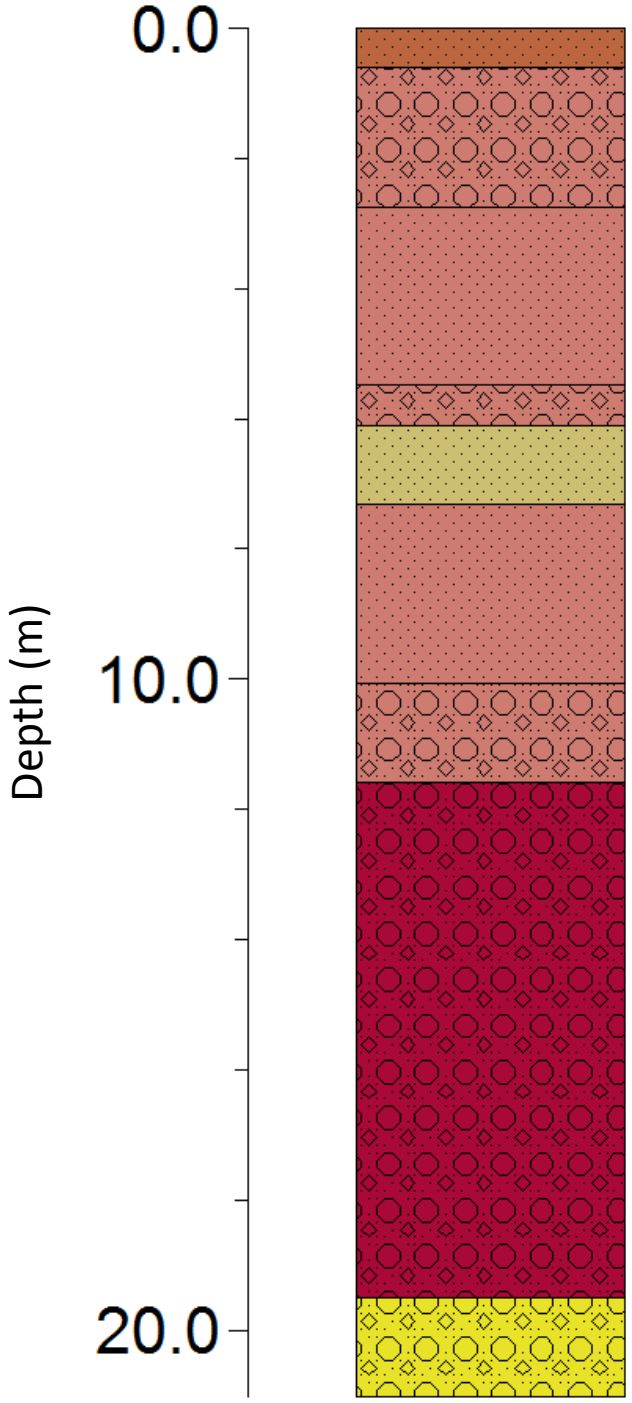
At ~4 m, the rock unit comprises 54 vol% minimally-shocked Kaibab, 32 vol% impact melt, 12 vol% lechatelierite, and trace amounts of Moenkopi

- ~300 m from the crater rim
- Varying amounts of impact melt (ranging from 0.3 – 38 vol%) and lechatelierite (ranging from 0.5 – 12 vol%) are found within all of the units down to a depth of 14 m.
- The first 2 m is alluvium
- From 2 – 4.3 m comprises minimally-shocked Kaibab and varying amounts of impact melt and lechatelierite
- There is mixing of Kaibab and Moenkopi from 4.3 - ~7.6m (95-60 vol% Kaibab and 40-5 vol% Moenkopi)
- Minimally-shocked Kaibab is the dominant rock type from ~7.6 – 10 m
- There is mixing of Kaibab and Moenkopi again from 10 – 15 m



Drill hole 47

- ~500 m from the crater rim
- The first ~0.5 m is alluvium
- From ~0.5 - 6 m is mixing of minimally-shocked Kaibab and Moenkopi (~95-60 vol% Kaibab and ~40-5 vol% Moenkopi)
- Minimally-shocked Kaibab is the dominant rock type from 6 – 7.5 m
- There is mixing again of minimally-shocked Kaibab and Moenkopi from 7.5 – 11.5 m. At ~9.8 m, Moenkopi becomes the dominant rock type.
- No impact melt or lechatelierite were recorded in this drill hole



Southwest transect

- Heavily-shocked Coconino and Kaibab are only present in the drill hole nearest to the rim (39)
- Heavily-shocked Coconino, as well as Kaibab, transitions into minimally-shocked material by a distance of ~70 m from the rim (drill hole 40)
- The majority of mixing between Kaibab and Moenkopi occurs at a distance >170 m from the rim
- Impact melt and lechatelierite are found on the surface down to a depth of ~14 m at a distance of ~300 m from the rim (drill hole 45)